NJDEP TECHNICAL GUIDANCE
Draft Document Review Form

COMMITTEE: **Historic Fill Technical Guidance Committee**

DOCUMENT: ***Historic Fill and Diffuse Anthropogenic Pollutants Technical Guidance***

START of Comment Period: **Wednesday, June 1st, 2011**

END of Comment Period: **Wednesday, July 13, 2011**

Commentor Name:	**Master List of compiled comments**
Affiliation:	***NJDEP***

Page	Chapter	Section	Subsection	Comments	Response
3	1			If the LSRP uses professional judgement and varies from the Technical Rule requirments to determine that investigation or remediation for PAHs beneath a parking lot, etc, is not necessary will their be a requirement to submit a variance form for each case? It seems overly redundant to submit a form for every case or AOC that acknowledges that there are likely or even always PAHs beneath parking lots, etc. This adds unnecessary cost and burden for something that should be self evident.	The Department expects LSRPs to use professional judgment when applying the Department's rules and guidance in order to conduct a site investigation. If an LSRP varies from a rule they will provide a discussion regarding how they varied and why and this should be indicated on the appropriate forms. Deviations from guidance should be identified in submitted documents. The Technical Rule and this guidance does not require the collection of analytical samples from historic fill material. As such, a variance in this situation would not be required. If the LSRP/RP elects to collect samples, the sampling locations should be selected to be representative of the historic fill material and not be potentially biased by the asphalt. Note that PAH analysis is recommended when historic fill material samples are to be collected for analysis. When historic fill material contamination is detected above the Department's health based levels at a site it is important to have mechanisms to control exposure. What might be self evident to the investigator may not be self evident to a property buyer and future occupants of the property.
3	1			The draft guidance document includes a statement that "some of the recommendations provided here differ from the Technical Rule requirements." The discussion indicates that the investigator may follow recommendations in the draft guidance document and simply note that they have varied from the rule requirements but have followed the technical guidance. The draft guidance document should point out each of the instances where recommendations differ from the TRSR and provide an explanation to assist the investigator in complying with SRRA.	Section 1 of the guidance has been edited to clarify when investigators should vary from the current Technical Requirements.
3	1	1		3rd Para. -Administrative Procedures process comment:The guidance should not reach "beyond" the regulations with specific prescriptive procedures.The Department should not include a procedure in the guidance that has the weight of a requirement that has not been subject to public comment.	Application of the recommendations contained in the guidance is entirely voluntary. An investigator may continue to apply the requirements in the Technical Rules. The proposed Technical Rules, that were published on Aug 15, 2011, reflect the recommendations contained in this guidance. These rules are now open for public comment. Based on review of the comments and the adoption of the rules the stakeholder committee will revise the historic fill material guidance accordingly.

3	2			The guidance states: "The investigator may either remediate historic fill under the assumption that it is contaminated or they may establish, via sampling, that the historic fill material is not contaminated above the Department's residential soil remediation standards". Other options (such as institutional controls) may be appropriate depending on land use (e.g., contaminant levels above residential but below industrial at a commercial site). The guidance must reflect these options.	The guidance has been revised to clarify this situation.
3	2			The draft guidance document offers two options to address historic fill at a site: "The investigator may either remediate historic fill under the assumption that it is contaminated or they may establish, via sampling, that the historic fill material is not contaminated above the Department's residential soil remediation standards, N.J.A.C. 7:26D-4." This section should also point out that the investigator may choose to characterize the historic fill material, as is noted in the TRSR at N.J.A.C. 7:26E-4.6(b).	The guidance has been revised to clarify this situation.
4	3	1		delete "north west and south east" from first sentence	The guidance has been revised to make this correction.
4	3	1		3rd paragraph; 5th sentence - change "chose" to "choose"	The guidance has been revised to make this correction.
4	3	1		3rd paragraph; last sentence - requirements for soil and GW are not similar - change sentence to "Requirements are also provided in the TRSR for …." add the citation (N.J.A.C. 7:26E-3.12(b)4-6) to the end.	The guidance has been revised to make this correction.
4	3	1		4th paragraph - change "Since that time" to "Over time"	No change is necessary.
4	3	1		Last para. - Because the content of the revised Tech Rule is not certain, this guidance should be designated "Interim".	This change is not necessary. The Department will revise this and other guidance when the new rules come into effect
4	3	1		"Investigation requirements allow the remediating party to either sample the fill for certain contaminants or to assume that the fill is contaminated." The phrase "certain contaminants" is not clear. If this is intended to limit the definition of historic fill to the 11 contaminants identified on Table 4-2, then this does not appear to be consistent with the TRSR requirements which include the option to characterize the historic fill material. The phrase "certain contaminants" should be clarified or deleted.	The current Technical Requirements refer to N.J.A.C. 7:36E-3.4, 3.6 through 3.9 to determine sampling requirements. This requirement is not particularly clear. In general, the Department recommends that an investigator that wishes to sample material that is believed to be historic fill material should sample for PAH compounds and metals. The guidance has been revised to make this clarification.
4	3	2		Relates to pp. 4 & 5, sections 3 & 4 - Generally, DAP also impacts other media (e.g., sediments, surface water, non-historic fill ground water). The text should note that, for the purpose of this Historic Fill Guidance, DAP is limited to contaminants in soil and related ground water.	DAP may affect other environmental media, however, no change is needed because the guidance does not refer to the remediation of any other environmental media than surface soils.
5	3	2		The draft guidance document states clearly that DAP is not considered to be an AOC but still requires remediation. It is confusing why from a remediation standpoint the draft guidance document treats DAP as if it were a site-specific AOC, when by definition DAP is a background issue. N.J.A.C. 7:26E-3.7(g) currently provides a systematic approach to demonstrating background ground water contamination and states that no further remediation is required for ground water if 1) the contaminants were never historically used on the site, 2) there is no additional evidence of an onsite discharge, and 3) contamination is present in the background wells. These conditions are equivalent to the atmospheric conditions that would result in DAP. The guidance document should treat DAP in a manner similar to background groundwater contamination or natural background soil contamination.	The Guidance states "While the Department does not consider DAP to be an AOC, pursuant to the Technical Rules at N.J.A.C. 7:26E-1.8, the contaminants present in DAP still may represent a health risk if left uncontrolled." What this means is that an investigator should not "go looking" for DAP but should take steps to mitigate exposure to it when DAP is identified at a site during the course of investigating other areas of concern. The reference to "background ground water contamination" and "background soil contamination" reflect somewhat different statutory and regulatory requirements. The Technical Rules require certain documentation when a remediating party wants to claim that ground water contamination identified on their property is caused by a "background" or up-gradient source and thus not their responsibility to remediate. The Brownfield statue at N.J.S.A. 58:10B-35(g)4 and the Technical Rules at N.J.A.C. 7:26E-3.10 address how remediating parties should determine when there are concentrations of contaminants occur naturally in soil at their site. Because the Department cannot require anyone to remediate naturally occurring constituents, the remediating party needs to collect basic information in order to determine if concentrations detected at the site are present due to discharge of a hazardous substance or are naturally occurring.
5	4			It would help to list what NJDEP considers to be other potential sources of DAP. EPA has defined non-point sources of pollution as oil, grease, and toxic chemicals from urban runoff, sediment from improperly managed construction sites, and excess fertilizers, herbicides and insecticides from agricultural lands and residential areas. EPA also notes different deposition scenarios such as rainfall, snowmelt, and water runoff.	The Department considers DAP to be contamination present on surface soils from regional atmospheric deposition. PAHs and metals are common contaminants related to DAP.

5	5	1		The draft guidance document states that "the investigator must evaluate the presence of historic fill during the preliminary assessment conducted for the site. This is inconsistent with the TRSR and practical investigation practices which require the investigator to identify historic fill during the PA. But, the historic fill is evaluated during the SI and/or RI. NJDEP should revise the text to read "the investigator must identify [not evaluate] the presence of historic fill during the preliminary assessment conducted for the site."	But we assume that even when a full blown PA is not required that basic historical site information is needed to appropriately investigate and remediate the site. The guidance has been revised to make this clarification.
6	5	1		This section states that SRRA exempts the finding of historic fill as a reportable discharge. Please clarify and confirm whether a written notification other than an LSRP retention form must be submitted to notify the NJDEP of the historic fill material.	The SRRA eliminates the requirement to call the NJDEP Hotline upon the finding of historic fill material; however, it does require the elimination of exposure using engineering and institutional controls. The investigator must submit forms associated with the later phases of investigation such as those for the site investigation report and the remedial investigation report.
6	5	2		2nd paragraph - the TRSR does not currently require HFM limited to an area within the Site to be investigated; Table 4-2 can be used to assume the HFM is contaminated; the guidance should not be more stringent than the Rule; the rationale for the change in approach should be provided. In our opinion, the approach should be the same; just because the HFM is limited to the site and not widespread does not mean it is any more likely to deviate from Table 4-2. Similarly, HFM throughout a region should not be assumed to be homogeneous or of similar characteristics or contaminants. Hence, all HFM should be able to be characterized using Table 4-2.	The Legislature directed the Department to establish a presumptive remedy for regional historic fill material. Fill that is not wide spread does not fall under the same presumption. The delineation of historic fill material within a property allows for a Deed Notice that does not include the entire site. Additional explanation and clarification has been added to the guidance document. The Technical Rules specify different requirements for ground water contamination related to historic fill material depending on whether the fill is regional or contained within the property boundaries. See N.J.A.C. 7:26E-3.12(b)6i and ii.
6	5	2		The current PID/FID threshold of 5x above background should be utilized, given the potential ambient interferences with these instruments.	The guidance has been revised to make this correction.
6	5	2		The draft guidance document states "…elevated PID/FID readings… are good indications that additional, non-historic fill AOCs are present." This statement appears to exclude elevated organic vapors from historic fill material. It should be up to the investigator to determine whether or not volatile organic compounds, and related elevated PID/FID readings, are associated with historic fill.	The Technical Rules (N.J.A.C. 7:26E-4.6(b)3iii(1) stipulates the sampling for volatile organics when field instrumentation measurements exceed 5 times background. The detection of volatile organics would prompt investigation of an area of concern within historic fill material and the LSRP may use professional judgment regarding the specific sampling to be conducted in this situation.
6 6	5 5	2 2	con't	The draft guidance document states, "Where field instrumentation (PID/FID) detects volatile organics above background, the investigator should also analyze samples for the EPA Target Compound List Volatile Organic compounds pursuant to N.J.A.C. 7:26E-2.1 (Table 2-1 and footnote 1)." This statement appears to require the investigator to analyze all samples that exhibit elevated organic vapor readings. The TRSR at 7:26E-4.6(b)3iii defines this requirement for readings greater than 5 times background, not just any readings above background. This further raises the question as to what is meant by "above background." If, for example, background is measured at 1.0 ppm and a given 6-inch sample interval exhibited an organic vapor reading of 1.1 ppm, could the investigator be accused of errors and omissions if he or she did not collect a sample from that interval for analysis of VOCs? (continuted) Both requirements (analyzing all samples with elevated PID/FID readings per the draft guidance document and analyzing all samples with PID/FID readings greater than 5 times background (TRSR) are arbitrary. While it is reasonable to analyze representative samples for VOCs, the selection of representative samples for laboratory analysis should be up to the professional judgment of the investigator. The requirement to analyze samples that exhibit elevated organic vapor readings should be modified so that the sample selection is based on professional judgment as appropriate to assess the conditions observed in the field.	Same as above…. The Technical Rules (N.J.A.C. 7:26E-4.6(b)3iii(1)…
6	5	2		The draft guidance document states: "If historic fill is not part of a regional historic fill area and is limited to an area within the site it should be investigated as an area of concern..." The trigger for this requirement is unclear because neither the draft guidance document nor the TRSR define "regional historic fill area." Further, the draft technical guidance provides no direction in the even that the historic fill is part of a "regional historic fill area." These points should be clarified in the guidance.	The Legislature directed the Department to establish a presumptive remedy for regional historic fill material. Fill that is not wide spread does not fall under the same presumption. The delineation of historic fill material within a property allows for a Deed Notice that does not include the entire site. Additional explanation and clarification has been added to the guidance document.

6	5	2		Historic fill that is not related to a "regional" issue is to be addressed as a separate AOC. In this section, please clarify what is considered to be "regional historic fill". For example, is it greater than 0.25 acres or 0.50 acres in extent, whatever is not on the NJGS historical fill maps, or only within the limits of the property boundary?	Generally, for historic fill material to be considered regional, a site under investigation would have to fall within an area of fill mapped by the NJGS or as documented using aerial photography as extending over large areas and including several to numerous properties. There is no established areal extent that defines "regional historic fill."
6	5	2	1	5th and last bullet on page 6 - currently the Rule allows for the use of aerial photos or the DEPs GIS maps to verify the presence of HFM site-wide; rationale should be provided for the change to the more costly and conservative approach of requiring a subsurface investigation on every site.	The requirements of N.J.A.C. 7:26E-4.6(b) requires soil borings or test pits in order to observe the extent of contaminated historic fill material. The guidance has not added any additional subsurface investigation requirements. The use of areal photographs remains an important line of evidence when documenting the presence and extent of historic fill material.
6	5	2	1	Section 5.2 says "Site Investigation" but in 5.2.1 the first four bullets requires determining vertical and horizontal extent which would take place during the RI not the SI. The scope of the SI for historic fill is un-necessarily costly. Much of this information can and should be gained at the RI stage.	The guidance document has been clarified to indicate that during the SI a general evaluation of the presence of historic fill material should be conducted. During the SI, analysis may be conducted to evaluate compliance with the soil remediation standards. A more detailed delineation must be conducted during the RI phase. If the historic fill material is to be presumed to be contaminated, sampling is recommended but not required in either the SI or RI phase.
6	5	2	1	The samples collected during the SI should count towards the total number of samples collected at conclusion of the RI	Samples collected in the SI may be used with the data collected during the RI. Note that analytical sampling is not required unless the LSRP/RP chooses to compare with the Soil Remediation Standards. If the historic fill material is to be presumed to be contaminated, delineation is required, not analytical sampling
6	5	2	1	Collecting discreet fill samples can result in great variability of analytical results. The use of structured composites should be allowed, to lessen the variability	Note that analytical sampling is not required unless the LSRP/RP chooses to document that contaminant concentrations in the historic fill material do not exceed the Department's residential soil remediation standards. The use of "structured composites" is currently not acceptable under the Technical Rules or proposed rule.
6	5	2	1	When extending the test pit 2 feet below the fill, care must be exercised to avoid breaching any low permeability soils underlying the fill.	The guidance has been revised to make this clarification.
6	5	2	1	The draft guidance document specifies test pits, trenches or borings at the suspected extent of the historic fill material or at the property boundaries to a depth of 2 feet below the fill material to determine the vertical and horizontal extent of the fill. This requirement is more prescriptive than the TRSR which requires a minimum of four explorations that "shall extend below the water table as necessary to establish the vertical limits of the fill material." NJDEP should eliminate the 2-foot depth requirement for consistency with the TRSR and allow for professional judgment to establish the vertical limits of fill material.	The guidance requires subsurface evaluation to a depth of two feet below the fill to determine if ground water is encountered. Since this is used as the ground water sampling trigger, alternative methods to determine depth to ground water may be considered. The reference to "at the property boundary" has been removed. The Tech. Rule and guidance requires delineation of historic fill material below the water table where such conditions exist.
7	5	2	1	final bullet - if the results confirm that the HFM is contaminated, can't the investigator at that point use Table 4-2 to characterize the fill instead of conducting a remedial investigation?	The Technical Rule currently allows use of Table 4-2, but the table has been removed from the proposed rule. It is recommended that the general nature of the fill material as identified during subsurface investigations be cited in reports and the Deed Notice rather than referring to Table 4-2. A more detailed delineation is required during the RI phase, where analytical sampling is recommended, but not required.
7	5	2	1	final sentence - recommend deleting last 3 words "of historic fill".	The document has been revised to make this correction.
7	5	2	1	1st bullet, 3rd sub-bullet - Guidance should acknowledge that fill can be heterogeous without discernable layers that can be traced. At least one representative sample should be collected. For fill with layers, significant variability can occur within a given layer, and layers (i.e., lifts) are typically interfingered. Guidance should acknowledge the complexity of fill - not layer cake - and that professional judgment is necessary to decide whether layers represent potentially different source materials or otherwise heterogeneity within fill of a similar source material.	The Department believes that LSRPs will need to use professional judgment to determine appropriate sample locations on a site-by-site basis. The guidance currently has reduced the sampling (when analytical samples are to be collected) from each stata in each boring to a more general sampling of the strata found at the site.

7	5	2	1	During evaluation of analytical results collected from historic fill, this guidance states that "if analytical results confirm that the historic fill does not exceed the Department'sresidential soil remediation standards, no further investigation of the fill is required." Please clarify if the impact to groundwater pathway needs to be addressed during this data evaluation and provide justification for no need to compare the results to the NJDEP impact to groundwater screening levels.	When sampling has been conducted upon historic fill material, attainment of the residential soil remediation standards is considered appropriate since it is likely that any constituent found to be above the impact to ground water soil remediation standard is due to background conditions (metals). Since the presence of historic fill material within two feet of the ground water table requires ground water sampling, potential impacts can be evaluated in those situations. At that point ground water sampling and classification exception area requirements addressed elsewhere in the guidance should be followed.
7	5	2	1	The document must provide some direction for how the data can be treated, e.g. estimate of mean, most likely value, mean at UCL, range, etc.	At this point comparison to standards should be made using single point compliance. The Attainment/Compliance Technical Committee is developing guidance regarding the conditions and methodology for when averaging or other statistical approaches would be acceptable.
7	5	2	1	Analyzing historic fill samples for full TCL/TAL+EPH will likely result in uninterpretable results. Expanded screening should be reserved only for those cases where impacts from site operations are suspected.	Analytical sampling is recommended, but not required unless an assertion is to be made that the historic fill material is clean and meets the Departments residential soil remediation standards. Even in this situation, full TCL/TAL+EPH analysis is only required on a percentage of samples.
7	5	2	1	The draft guidance document specifies two sample locations per acre with one sample per location for each historic fill layer encountered. This requirement is more prescriptive than the current TRSR (7:26E-3.12(b)2ii) which states: “Demonstrate that the historic fill material is not contaminated above the residential soil remediation standards by sampling pursuant to N.J.A.C. 7:26E-3.4, 3.6 and 3.9, as applicable.” Section 3.9 of the TRSR is the only referenced section that includes a specific sampling frequency based on area: “Areas of less than 10 acres shall be sampled at a rate of at least one sample for every two acres.” Therefore, it appears that the sampling requirements of the draft guidance document reflect a four-fold increase of the minimum sampling requirements of the TRSR. NJDEP should delete the requirement for 2 sample locations per acre for consistency with the TRSR and allow for professional judgment to determine the appropriate sample frequency.	Analytical sampling is recommended, but not required unless an assertion is to be made that the historic fill material is clean and meets the Departments residential soil remediation standards. The original intent of TRSR Section 3.9 was to evaluate soil conditions in areas not expected to have had discharges. In the case of historic fill material, experience supports that contaminants are present in excess of residential soil remediation standards. Note that TRSR 4.6(b)3i states, “ At least four samples per acre, per fill type are required; if the presumption is to be made that the historic fill material is not contaminated. The current guidance recommends a lower frequency of analytical sampling and not sampling every stratum from each location.
7	5	2	1	**5th Bullet:** Change the name to “Fill” or “Fill Soil”. The TRSR provides a basis for sample selection using the TPHC data from the initial sampling. This had incorporated use of less costly quick turn-around laboratory analysis to facilitate decisions for contingency analyses. Also, TPHC was one constituent, versus PAHs which includes typically 16 constituents. Therefore, include a similar sample selection decision basis for the 25% analytical parameters. We suggest using Total PAHs for TCL organics (metals are already being run at 100%). However, analytical hold times should be allowed to be extended by freezing soil samples, consistent with SW-846 methods to facilitate contingent analysis decisions.	Heading revised to “Fill Soil” This guidance document recommends that if soil samples are to be collected, that they be analyzed for the EPA Target Compound List (TCL) Polynuclear Aromatic Hydrocarbons (PAHs) and EPA Target Analyte List (TAL metals). In addition, twenty-five percent of all samples should be analyzed for complete TCL/TAL analysis and Extractable Petroleum Hydrocarbons (EPH), with a minimum of one sample, per stratum/fill type, per site. Note that analytical sampling is only required where historic fill material is to be compared with residential soil remediation standards, rather than presumed to be contaminated. Experience has indicated that total petroleum hydrocarbons was not a good indicator or historic fill material and the old TPH Method 418.1 is no longer available. The proposed TSRS makes no mention of analytical methods for historic fill material sampling so the guidance will not be out of compliance with the May 2012 TRSR.

7	5	2	2	The draft guidance document states: "Once the presence of historic fill is confirmed and the fill material is located within two feet of the seasonally high water table, the investigator may…Assume that the fill ground water is contaminated above the applicable ground water remediation standards N.J.A.C. 7:26D-2 and conduct a remedial investigation pursuant to N.J.A.C. 7:26E-4.6(b)." The reference to section 4.6(b) is confusing as that section of the current TRSR refers to the remedial investigation of soils. N.J.A.C. 7:9-6.6(a) requires that a CEA description specify the ground water contaminants so it is not clear how one could simply "assume that the fill ground water is contaminated" and still make a complete CEA proposal. The draft guidance document later appears to conflict with the recommendation to assume that the fill ground water is contaminated. Section 5.3.2 states: "If information needed for a ground water classification was not obtained during the site investigation as outlined in section 5.2.2 it should be gathered during the remedial investigation." The CEA guidance states that "In some cases (e.g., sites where ground water has been contaminated by metals from historic fill or other discharges), the Department may [emphasis added] accept a proposal for an "indeterminate" CEA longevity." The CEA guidance does not explicitly offer this possible agency acceptance for groundwater contaminants that are not metals. The draft guidance document should state clearly whether a CEA proposal based on assumed contamination constitutes a variance and provide clear guidance as to how such a CEA proposal should be presented in regards to contaminant concentrations.	The reference to N.J.A.C. 7:26E-4.6 has been changed to 7:26E-4.4 – Remedial Investigation of Ground Water. The guidance provides for the sampling of ground water during the SI phase or the assumption that contamination is present that will be evaluated during the RI phase. The current CEA guidance is somewhat out of date and does not specifically address areas of historic fill material. Revision of the CEA guidance is anticipated in the near future. The intent of the historic fill material guidance is to address all ground water contaminants associated with historic fill material (not just metals).
8	5	2	2	first bullet - recommend inserting the word "soil" in front of "remedial investigation".	Clarification provided to refer specifically to the ground water remedial
8	5	2	2	Final bullet - add to the middle of the sentence "or if the ground water is assumed to be contaminated" then the investigator must est a CEA….	A CEA can not be established based upon the assumption that ground water is contaminated.
8	5	2	2	2nd bullet - If non-drillable fill extends to the property line and in the downgradient direction, how is the 10 foot minimum issue to be resolved? Offer some practicable guidance or at least acknowledge that professional judgment to implement a practicable solution is acceptable.	Where conditions exist that preclude the collection of a ground water sample within the historic fill material area of concern, according to N.J.A.C. 7:26E-4.4(e)2, a ground water sample must be collected within 10 feet of the area of concern. In situations where that is not possible, we expect the use of professional judgment in selecting sample location.
8	5	2	2	Further information is warranted regarding requesting that the NJDEP establish a groundwater CEA should historic fill material extend beyond the property boundary. How does the investigator know if historic fill material has extended beyond the property boundary if we are not testing the fill material? Further information should include who to contact at the NJDEP and what the responsibilities of the responsible party are once the NJDEP has established the CEA.	A CEA would only be established due to the presence of historic fill material when sampling actually confirms exceedance of applicable Ground Water Remediation Standards. Where confirmed, a CEA would only be established within the property boundaries of the site under investigation.
8	5	2	2	If we are assuming that the historic fill material in the unsaturated zone is impacted and using table 4-2-Target Contaminant Concentrations in Typical Historic Fill and the historic fill is within two feet of the groundwater table, we should be able to analyze the groundwater for only PAHs and metals and not the complete TCL/TAL list.	The required sampling for full TCL/TAL has been determined to be appropriate and will act as a means to evaluate contamination that may arise from other areas of concern that may exist within the historic fill material.
8	5	2	2	If historic fill is confirmed the draft guidance document requires the investigator to "Collect one sample pursuant to N.J.A.C. 7:26E-3.7 using any generally acceptable sampling method specified in the NJDEP Field Sampling Procedures Manual. The Department recommends the use of the low-flow sampling method to minimize sediment in the sample in order to prevent a false positive result." This requirement appears to contradict previous Department recommendations that preclude the use of LFPS for the first round of sampling. The guidance should clarify that the use of LFPS for the initial, and possibly only, round of sampling associated with an historic fill AOC is considered acceptable by NJDEP or if this constitutes a variance. If this will be considered a variance, the guidance should provide an explanation to support the variance.	Were the guidance provides direction that differs from the existing rule – it will constitute a variance and should be documented as such. The investigator would only need to say that they followed the Historic Fill guidance. After the rules are adopted this will be a moot point.

8	5	2	2	**Ground Water:** The opening paragraph and first bullet seem to contradict the TRSR and need clarification and or revision. Pursuant to NJAC 7:26E-3.12, ground water sampling and analysis are required in accordance with NJAC 7:26E-3.7 when contaminated historic fill is present within two feet of the seasonal high water table. The option in the guidance to conduct a remedial investigation per NJAC 7:26E-4.6(b) seems untenable since that part of the TRSR does not address ground water. The option to conduct a soil RI for historic fill is included in Section 5.2.1 of the Guidance. We suggest changing the option to be the choice of either; (1) contaminated historic fill not within 2-feet of the seasonal high water table requires no further ground water investigation; (2) contaminated historic fill within 2-feet of the seasonal high water table requires further ground water investigation per NJAC 7:26E-3.12 and 3.7.	The reference to N.J.A.C. 7:26E-4.6 has been changed to 7:26E-4.4. Clarification has been provided in both the SI and the RI sections of the guidance to indicate that where historic fill material is not located within 2 feet of the seasonal high water table, ground water sampling is not required
8	5	2	2	**Ground Water; 5th Bullet:** The guidance indicates ground water sample(s) should be analyzed for full TAL/TCL parameters. However, this is not consistent with the ground water investigation requirements of NJAC 7:26E-3.7, which indicates selection of analytical parameters should be based on contaminant solubility of any soil contaminant detected in the area of concern, and all of the soil between the contaminant and the saturated zone is less than 15 percent silt and clay; or any part of the area of concern at which the soil contamination was detected is located within 2,000 feet of a public supply well. The Guidance should be revised to be consistent with the TRSR and facilitate use of soil fill sample analytical data to identify contaminants for further analysis in ground water.	We acknowledge that these requirements differ from the existing rules and establish new/minimal sampling to establish a CEA within historic fill material areas. After the rules are adopted this will be a moot point.
9	5	2	2	first bullet - TRC disagrees with the change in approach for HFM contained within the property boundaries; is DEP assuming that just because the fill is contained to the site and not regional that somehow that makes the fill more likely to be contaminated with compounds not included or Table 4-2? Or more likely to contaminate GW? why is it ok for a CEA to be automatically used on a site where HFM is widespread or regional, but a GW RI is required for sites with a limited amount of fill? No rationale is provided for the change to this more costly and conservative approach.	The current guidance has not changed the approach requiring delineation of the historic fill material or ground water found to be contaminated from the fill. Where historic fill material is found to be limited to part of a site, the extent of the fill and when required, the extent of the ground water contamination must be delineated rather than just accepting site-wide engineering and institution controls and CEA.
9	5	2	2	Last sub-bullet - Change the word "completely contained" to "…material limits occur completely within the property boundaries…"	Change is not necessary.
9	5	3	1	First bullet - Re the 4 borings per acre frequency; there are often times when the building (or buildings) occupy most of the property, leaving only very small areas accessible for drilling. In these instances, DEP should allow a reduced number of borings instead of 4 per acre; the guidance should speak to this scenario.	The investigator always has the ability to vary from a recommended sampling frequency based on professional judgment. It not necessary to restate that fact through out the guidance.
9	5	3	1	Again, TRC disagrees with the more conservative approach for fill within a site. If a wetland area within a site is clearly defined on an aerial photo and that area has obviously been filled; it is unclear why this area should be treated any differently than large coastal areas that have beer filled. The size of the area does not dictate the quality of the fill; so both types of filled areas should be addressed in the same manner.	Answered above.
9	5	3	1	The draft guidance document states: "If historic fill is not part of a regional historic fill area and is limited to an area within the site it should be investigated as an area of concern..." The trigger fo this requirement is unclear because neither the draft guidance document nor the TRSR define "regional historic fill area." Further, the draft technical guidance provides no direction in the even that the historic fill is part of a "regional historic fill area." These points should be clarified in the guidance.	Answered above.
9	5	3	1	The draft guidance document "allows the investigator to characterize contamination in historic fill by using the contaminant and values provided in Table 4-2 below or by collecting and analyzing contaminant samples for each type of historic fill present to determine the site specific contaminant levels.." The draft guidance document should acknowledge that the historic fill at a given site likely contains contaminants other than those on Table 4-2 and that those contaminants, if associated with the historic fill, should also be managed as historic fill.	The reference to "Table 4-2 below" has been modified so that the table will not be included. While experience supports that PAHs and metals are the most significant constituents present in historic fill material that exceed soil remediation standards, the table was never meant to be exclude other contaminants. Reference to Table 4-2 is removed from the proposed TRSR. The identification of volatile organics may be indicative of discharges within historic fill material and the detection of PCBs may trigger other federal TSCA requirements.

10	5	3	1	"The Department recommends that the use of Table 4-2 for the contaminant characterization in the Deed Notice be suspended. Instead the Department recommends that the investigator provide a general description of the fill material including information such as the depth below ground surface, thickness and characteristics of the fill material (i.e., ash, brick, debris)." It is unclear how this is to be incorporated into the deed notice text. The model deed notice text specifically references Table 4-2 for historic fill and otherwise requires concentration data be presented in Appendix B for the restricted use area. Given that NJDEP does not allow changes to the text of the model deed notice it is unclear how the recommendation can be implemented by the remediating party.	While the Department does not encourage changes to the "boiler plate" language in the deed notice there are circumstances when not changing the language would result in wrong or misleading information in the deed notice. Based on this guidance the investigator should delete the reference to Table 4-2 and insert the language suggested by this guidance. Note that the Deed Notice boilerplate language in the proposed TRSR has been changed to "A) Only for historic fill material extending over the entire site or a portion of the site and for which analytical data are limited or do not exist, a narrative that states that historic fill material is present at the site, a description of the material (e.g., ash, cinders, brick, dredge material), and a statement that such material may include, but is not limited to, contaminants such as PAHs and metals", to be in agreement with the guidance document.
10	5	3	2	"a ground water classification" - do you mean a CEA? Please clarify. Also last 2 paragraphs of p 10 seem to be in reverse order. Moreover, should suggested wording in the Deed Notice for DAP be provided, too?	Agreed. Section has been edited. Disagree that DAP would need to be specifically mentioned in the deed notice. If DAP is on the site there will be analytical data to include in the Deed Notice.
10	5	4		1rst Para. - Deed Notice - reference NJAC 7:26E- 8.2 and Appendix E or applicable revised rule sections.	Agreed. Section has been edited.
10	5	4		2nd Para. - If the site is non-residential / industrial, and the non--residential soil standards in the soil cap are not exceeded, remediation of the cap may not be necessary though engineering and institutional controls would still be required.	No change needed because the document already says that "Based on the current or intended use of the site a cap may be required to prevent exposure to the contaminants in the historic fill material."
10	5	4		The draft guidance document states: "The investigator may demonstrate that historic fill is already capped, making additional engineering controls unnecessary. Soil sampling conducted consistent with section 5.2.1 of this draft guidance document must be conducted to confirm that a soil cap, if present, does not exceed the Department's residential soil remediation standards." This section should be revised to note that sampling will not be required if the cap consists of certified clean fill material per 7:26E-6.4(b)2iv.	Agreed. Section has been edited.
11	6			**DAP:** While the attempt to acknowledge DAP in a remedial context is appreciated, the Guidance should be reviewed and revised to incorporate the provisions in the applicable statute that address limits to remediation requirements for contaminants that migrate onto a property from off-site sources.	The Department believes that DAP is a regional issue more akin to historic fill material than a discharge migrating from a near by contaminated site. No changes will be made to the document.
11	6	1		This section should be more informative for a guidance document. Definition in Section 3.2 mentions atmospheric deposition. What is the Department's information on this throughout the state? There are statewide background studies on arsenic. This and other studies done by / for NJDEP, or used by NJDEP, should be referenced and available on NJDEP website. Make other references available for other contaminants or provide authoritative links.	Agreed. Document has been edited.
11	6	1		Section 3.2 states that DAP is not defined as an AOC in the Tech Rule, unlike historic fill. Yet if the Department is requiring the PRCR to remediate exceedances of the SRS, then it should be included in the defination of an AOC. It should be noted that capping may not be required if exceedances are below the non-residential SRS on properties where current and future land use is non-residential. If this guidance is posted as an "Interim" Guidance, as recommended above, then DAP should be identified/defined, and the reader advised of it's pontential to be present under certain conditions. The requirement to remediate is inappropriate at this time. The Department should further it's risk evaluation of DAP and propose regulations through the Administractive Procedures process, subject to public comment as applicable.	The Department does not require any person to investigate DAP. The guidance simply allows the investigator to use the concept of DAP when evaluating data.

11	6	1		The portion of the Guidance Document regarding Diffuse Anthropogenic Pollution (DAP) is concerning. Clean fill imported onto a site that may have been used as a cap, over time, will inevitably become DAP. Atmospheric deposition, runoff from roadways and parking lots are just a few examples of contrubuting factors to DAP. According to the Guidance Document, a remedy for DAP is a cap consisting of clean soil fill material. What happens when the clean soil cap turns into DAP? Is another cap warranted? Where does the NJDEP draw the line? A second remedy for DAP, according to the Guidance Document is an asphalt cap. From our experience, an asphalt cap would be a contributor to DAP, so therefore your remedy (asphalt) leads to what you are trying to remedy (DAP). It seems like a never ending process.	The commenter makes a valid point. The Department will consider the future ramification of DAP.
11	6	1		Please comment as to whether or not runoff from asphalt (specifically with coal-tar based seal coat) is considered DAP. The presence of an asphalt cap as an engineering control for historic fill and/or DAP may create conditions in the surrounding soil with PAHs above residential soil remediation standards. In addition, it is likely that every parking lot and roadway has similar (DAP) conditions from the seal coat, as well as petroleum/oil drips from vehicles, tire particles and vehicle exhaust. This could create a cycle of asphalt engineering controls resulting in DAP conditions....all requiring Deed Notices, and continued monitoring.	Asphalt is unrelated to DAP. DAP is related to atmospheric deposition.
11	6	1		Does the Department intend to create a table similar to historic fill conditions to use to evaluated background DAP conditions?	No. The evaluation of DAP must be a site specific evaluation.
11	6	1		Other options for remediation from the Site should be included, such as excavation and removal of DAP material from the Site if the DAP is limited in extent.	The guidance does not limit the remedial options that are available to an investigator
11	6	1		The Department should provide some typical examples of when DAP may be encountered and how it recommends it be addressed. For example, while delineating a specific AOC for chlorinated volitle organics and a sample collected from beneath an asphalt parking lot identifies PAHs above any remedial standard but are clearly associated with the Asphalt, how does the Department recommend the exceedance of the standard be adddreseds by the LSRP? If it can be demonstrated that the impacts identified are not asociated with the AOC or discharge being investigated yet the impacts are identified and will not be addressed by the proposed remedy. Does the Department expect that all roadways, parking lots, driveway, etc. be addressed through a deed notice?	No. Asphalt is unrelated to DAP. DAP is related to atmospheric deposition.
11	6	1		DAP is not always limited to the upper six inches. Grading or other erosion can result in DAP compounds being detected at greater depths. It should be up to the investigator to demonstrate the limits of the DAP impact.	Agreed. Document has been edited to say that DAP is generally in surface soils
11	6	2		DAP is by it's nature an on-going ambient impact. Capping DAP impacted soils will only result in recontamination of the cap from continued deposition. When DAP is documented, no remedial action should be required, since the remediating party cannot control the ambient source.	The commenter makes a valid point. The Department will consider the future ramification of DAP.
11	6	2		According to the draft guidance document, DAP should be capped. If the DAP is due to ongoing atmospheric deposition, there is little point in capping it on the site. If the atmospheric deposition is still occurring, then the cap will just become contaminated. Even if there is no ongoing source for the DAP detected at a given site, there may be other circumstances that make establishing engineering and institutional controls ineffective and therefore unreasonable. For example, a small regulated site in an otherwise unregulated community might be found to contain DAP with no other impacts. Adhering to the draft guidance document would require capping the DAP at the site while the DAP in the entire surrounding area would remain exposed. If this were the case then the required remedy would not be protective and therefore should not be required. The requirement to cap DAP should be removed from the guidance document.	The commenter makes a valid point. The Department will consider the future ramification of DAP.
General				General comment: Issuance of guidance that is more stringent than the Rule will cause confusion for LSRPs. There is no guarantee that the rule will be changed to match the guidance. In the interim, some LSRPs will feel compelled to follow the more conservative guidance, which could cause consternation on the part of responsible parties and attorneys that will want the LSRP to follow the rule, especially when the rule is less conservative.	The Department has confidence that LSRPs will be able to apply professional judgment when determining how to apply rule requirements and technical guidance. It is up to LSRPs and remediating parties to determine the best remedial approach for any given site.

General	Several sections of the draft guidance document note that the investigator may assume that the historic fill is contaminated at the concentrations presented on Table 4-2 or sample the fill to show that the concentrations are less than the Residential Direct Contact Soil Remediation Standard (RDCSRS). There are several references to “applicable soil remediation standards” in the draft guidance document. However, the draft guidance document is silent as to whether impact to ground water soil remediation standards apply to historic fill. The draft guidance document discusses investigation and remediation of historic fill in terms of compliance with the RDCSRS. Section 5.2.1.states: “If analytical results confirm that the historic fill does not exceed the Department’s residential soil remediation standards, no further investigation of the fill is required.” In sections 5.4 and 6.1 the draft guidance document refers to “applicable soil remediation standards.” It is not clear whether the draft guidance document considers site-specific impact to groundwater soil remediation standards to be “applicable soil remediation standards” for historic fill. The guidance document should address the relationship between assumed contaminant concentrations in the historic fill and compliance with impact to ground water soil remediation standards.	The Department believes that typical levels of contamination in historic fill material exceed impact to ground water standard which is why the guidance allows the investigator to establish a CEA for ground water contamination with associated historic fill.
General	May I make a suggestion? I suggest that you solicit comments from the NJ State Soil Scientist employed by the USDA NRCS. One's ability to distinguish fill material from natural soil profiles becomes critical in site assessment of historic fill. As a soil scientist myself, I can think of a few points to add to the site assessment process you lay out. (e.g. requiring that soil logs be described using USDA terminology, which would be consistent with other DEP regulations (wetlands and stormwater rules).	Thank you for your suggestion.
General and Condensed	This Guidance Document should be revised throughout to properly and consistently utilize the defined term "historic fill material." As drafted, the Guidance Document inconsistently shifts back and forth between this statutorily and regulatorily defined term and the undefined term "historic fill." By statute and regulation "historic fill material" is fill placed on the site at some time in the past to raise the topography and that is contaminated and was when brought to the site. More specifically, ""Historic fill material" means non-indigenous material, deposited to raise the topographic elevation of the site, which was contaminated prior to emplacement...." NJAC 7:26E 1.8. (Emphasis provided.) See also NJSA 58:10B-12(h)(1): ""historic fill material” means generally large volumes of non-indigenous material, no matter what date they were emplaced or the site, used to raise the topographic elevation of a site, which were contaminated prior to emplacement ...." (Emphasis provided.)	Agreed. The document has been edited
Throughout Document	The definition of "historic fill" and "historic fill material" are interchanged throughout the Guidance Document. Under Section 5.1, *Preliminary Assessment*, the Guidance Document states that "The investigator must evaluate the presence of historic fill during the preliminary assessment conducted for the site." This can be conducted by using available records and maps, including a review of the New Jersey Geological Survey (NJGS) historical fill maps that are available at the website provided in the Guidance Document. According to the NJGS historical fill maps, "For the purposes of these maps, historic fill is non-indigenous material placed on a site in order to raise the topographic elevation of the site. No representation is made as to the composition of the fill or presence of contamination in the fill". The definition of "historic fill material" according to the Technical Requirements for Site Remediation is as it appears on page 5 of the Guidance Document. "Historic fill" by definition is***NOT*** contaminated material. "Historic fill material" by definition ***IS*** contaminated material. This Guidance Document uses these two terms in a haphazard fashion that is not consistent with their respective definitions. On page 4 of the Guidance Document, it states "By May 2012, the Department anticipates amendments to the Technical Rules that correspond to the recommendations provided here". At the time that these amendments are made to the Technical Rules, a thorough review of the terms "historic fill" and "historic fill material" should be conducted so that these terms are properly utilized throughout the Technical Rules.	Agreed. The document has been edited. Agreed. The document has been edited.